

SUBSTITUTE FORM PTO-1449
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U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
01997/273001

SERIAL NO.
09/160,454

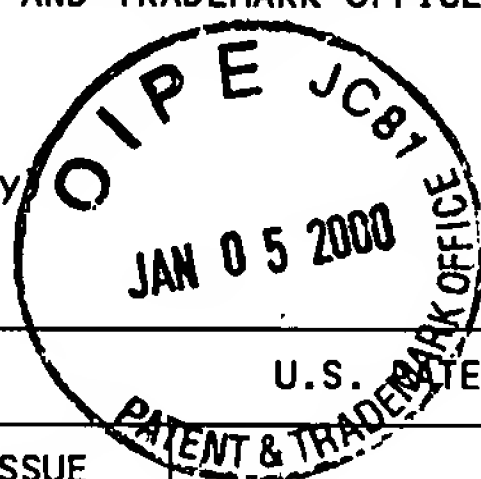
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT
Moungi G. Bawendi et al.

FILING DATE
September 24, 1998

GROUP
1641



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>W</i>	AA	5 9 9 0 4 7 9	11-23-99	Weiss et al.	250	307	DUPLICATE
	AB						
	AC						
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FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	AQ		
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EXAMINER

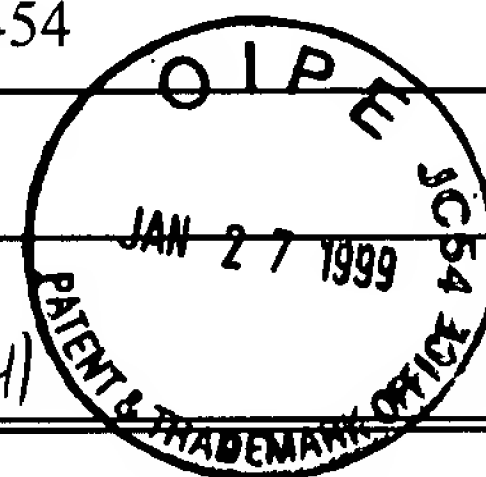
DATE CONSIDERED

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EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (REV 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 0492611-0290	Serial No. 09/160,454
		Applicant Bawendi, <i>et al.</i>	
		Filing Date Sep. 24, 1998	Group 1743 164

Information Disclosure Citation
(Use several sheets if necessary)



U.S. PATENT DOCUMENTS					
Examiner Initial	Document Number	Date	Name	Class	Subclass
(M)	5,293,050	Mar. 8, 1994	Chapple-Sokol, <i>et al.</i>	257	17
(M)	5,354,707	Oct. 11, 1994	Chapple-Sokol, <i>et al.</i>	437	106
(M)	5,422,489	Jun. 6, 1995	Bhargava	250	488.1
(M)	5,505,928	Apr. 9, 1996	Alivisatos, <i>et al.</i>	423	299
(M)	5,525,377	Jun. 11, 1996	Gallagher, <i>et al.</i>	427	512
(M)	5,751,018	May 12, 1998	Alivisatos, <i>et al.</i>	257	64

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	Document Number	Date	Country	Class	Subclass	Translation
						Yes No
(M)	98/19963	May 14, 1998	WO			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)		
(M)	Spanhel, <i>et al.</i> , "Photochemistry of Colloidal Semiconductors. Surface Modification and Stability of Strong Luminescing CdS Particles," <i>J. Am. Chem. Soc.</i> 109(19):5649-5655, 1987.	
	Kortan, <i>et al.</i> , "Nucleation and Growth of CdSe on ZnS Quantum Crystallite Seeds, and Vice Versa, in Inverse Micelle Media," <i>J. Am. Chem. Soc.</i> 112:1327-1332, 1990.	
	Coffer, <i>et al.</i> , "Characterization of quantum-confined CdS Nanocrystallites stabilized by deoxyribonucleic acid (DNA)," <i>Nanotechnology</i> 3:69-76, 1992.	
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	Whitesell, <i>et al.</i> , "Directionally Aligned Helical Peptides on Surfaces," <i>Science</i> 261:73-76, July 1993.	

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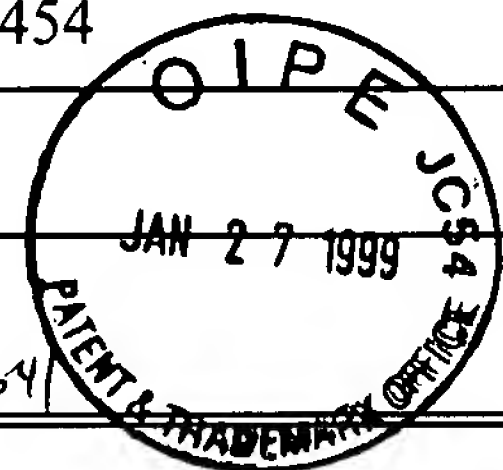
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	Colvin, et al., "Light-emitting diodes made from cadmium selenide nanocrystals and a semiconducting polymer," <i>Nature</i> 370(6488):354-357, August 4 1994.	GROUP 1700
	Lawless, et al., "Bifunctional Capping of CdS Nanoparticles and Bridging to TiO₂," <i>J. Phys. Chem.</i> 99:10329-10335, 1995. DUPLICATE	
	Dabbousi, et al., "Electroluminescence from CdSe quantum-dot/polymer composites," <i>Appl. Phys. Lett.</i> 66(11):1316-1318, March 13 1995.	
	Alivisatos, "Perspectives on the Physical Chemistry of Semiconductor Nanocrystals," <i>J. Phys. Chem.</i> 1996(100):13226-13239, 1996.	
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	Rogach, et al., "Synthesis and Characterization of Thiol-Stabilized CdTe Nanocrystals," <i>Ber. Bunsenges. Phys. Chem.</i> 100(11):1772-2778, 1996.	
	Hines, et al., "Synthesis and Characterization of Strongly Luminescing ZnS-Capped CdSe Nanocrystals," <i>J. Phys. Chem.</i> 100:468-471, January 1996. DUPLICATE	
	McGall, et al., "Light-directed synthesis of high-density oligonucleotide arrays using semiconductor photoresists," <i>Proc. Natl. Acad. Sci. USA</i> 93:13555-13560, November 1996.	RECEIVED MAY 10 1999 GROUP 1700
✓	Chee, et al., "Accessing Genetic Information with High-Density DNA Arrays," <i>Science</i> 274(5287):610-614, Oct. 25 1996.	

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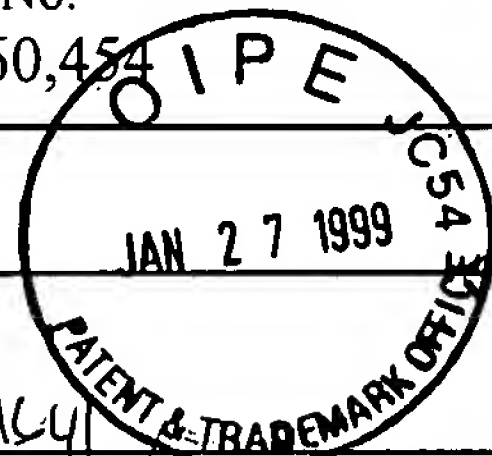
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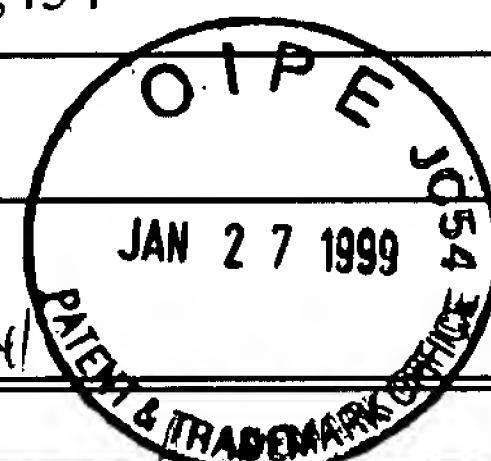
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<input checked="" type="checkbox"/>	Empedocles, <i>et al.</i> , "Photoluminescence Spectroscopy of Single CdSe Nanocrystallite Quantum Dots," <i>Phys. Rev. Lett.</i> 77 (18):3873-3876, October 1996.	
<input type="checkbox"/>	Nirmal, <i>et al.</i> , "Fluorescence Intermittency in single Cadmium Selenide Nanocrystals," <i>Nature</i> 383 :802-804, October 1996. ✓	
<input type="checkbox"/>	Egner, <i>et al.</i> , "Tagging in combinatorial chemistry: the use of coloured and fluorescent beads," <i>Chem. Commun.</i> :735-736, 1997. ✓	
<input type="checkbox"/>	Gan, <i>et al.</i> , "Enhanced Photoluminescence and Characterization of Mn-Doped ZnS Nanocrystallites Synthesized in Microemulsion," <i>Langmuir</i> 1997 (13):6427-6431, 1997. ✓	
<input type="checkbox"/>	Empedocles, <i>et al.</i> , "Quantum-Confined Stark Effect in Single CdSe Nanocrystallite Quantum Dots," <i>Science</i> 278 :2114-2117, December 1997.	
<input checked="" type="checkbox"/>	Fodor, "Techwire," <i>Science</i> 277 (5324):393-395, Jul. 18 1997.	
<input checked="" type="checkbox"/>	Kuno, <i>et al.</i> , "The band edge luminescence of surface modified CdSe nanocrystallites: Probing the luminescing state," <i>J. Chem. Phys.</i> 106 (23):9869-9882, June 1997.	
<input type="checkbox"/>	Dabbousi, <i>et al.</i> , "(CdSe)ZnS core-shell quantum dots: synthesis and characterization of a size series of highly luminescent nanocrystallites," <i>J. of Phys. Chem. B</i> 101 (46):9463-9475, November 13 1997. DUPLICATE	
<input type="checkbox"/>	Guha, <i>et al.</i> , "Hybrid organic-inorganic semiconductor-based light-emitting diodes," <i>J. Appl. Phys.</i> 82 (8):4126-4128, October 15 1997. ✓	
<input type="checkbox"/>	Fox, <i>et al.</i> , "Fluorescence and Redox Activity of Probes Anchored through an Aminotrithiol to Polycrystalline Gold," <i>Langmuir</i> 14 :816-820, 1998.	
<input checked="" type="checkbox"/>	Mikulec, <i>et al.</i> , "Fluorescent semiconductor nanocrystallites derivatized with biomolecules," <i>Amer. Chem. Soc. Nat'l Meeting</i> , Boston, MA, August 24 1998.	
<input checked="" type="checkbox"/>	Service, "Semiconductor Beacons Light Up Cell Structures," <i>Science</i> 281 :1930-1931, Sep. 25 1998.	
<input checked="" type="checkbox"/>	Jacoby, "Quantum dots meet biomolecules," <i>C&E News</i> :8, Sep. 28 1998. ✓	

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	Bruchez, <i>et al.</i> , "Semiconductor Nanocrystals as Fluorescent Biological Labels," <i>Science</i> 281 :2013-2016, September 1998.	RECEIVED FEB 1 1999 GROUP 1700
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